

Existence of a monopole

S/056/63/044/001/031/067  
B104/B144

is a vector, it is not conserved. The non-conservation of the parity with electromagnetic interactions can be estimated in another way according to M.Sachs (Ann.of Phys., 6, 244, 1959). This allows of indicating an upper limit of probability for the occurrence of monopoles in nucleon-nucleon collisions and also in other electromagnetic interaction processes. It is shown according to M.Sachs that effects from interaction of monopoles with the substance are negligibly small. If monopoles occurred with a traceable probability,  $J_{\mu}^{(m)}$  would be a pseudovector. It is still not clear why no monopoles occur in nucleon-nucleon collisions with a probability of more than  $10^{-34} \text{ cm}^2$  per nucleon. ✓

" ASSOCIATION: Institut fiziki Akademii nauk Belorusskoy SSR (Institute of Physics of the Academy of Sciences Belorusskaya SSR)

SUBMITTED: June 2, 1962

Card 2/2

PHILIPPI, I. N.

PHILIPPI, I. N.

Monopoles in electrodynamics. AN BSSR S. 1. 377-383  
1964. (MIRA 17 10)

1. Institut d'optique et de physique AN BSSR  
M.A. Yelipachewskiy.

VAYNSHTEYN, F.M.; TOMILENKO, Ye.I.; SHILOV, Ye.A.

Kinetics of iodination of aromatic amino compounds and *m*-phenol-sulfonate by iodine in aqueous solutions. Ukr. khim. zhur. 30 no.8: 831-838 '64. (MIRA 17:11)

1. Institut organicheskoy khimii AN UkrSSR.

VAYNSHTEYN, F.M.; DEGURKO, T.A.; TOMILENKO, Ye.I.; SHILOV, Ye.A.

Role of anion acceptors in the mechanism of nucleophilic substitution in aromatic systems. Ukr.khim.zhur. 31 no.5:518-521 '65.

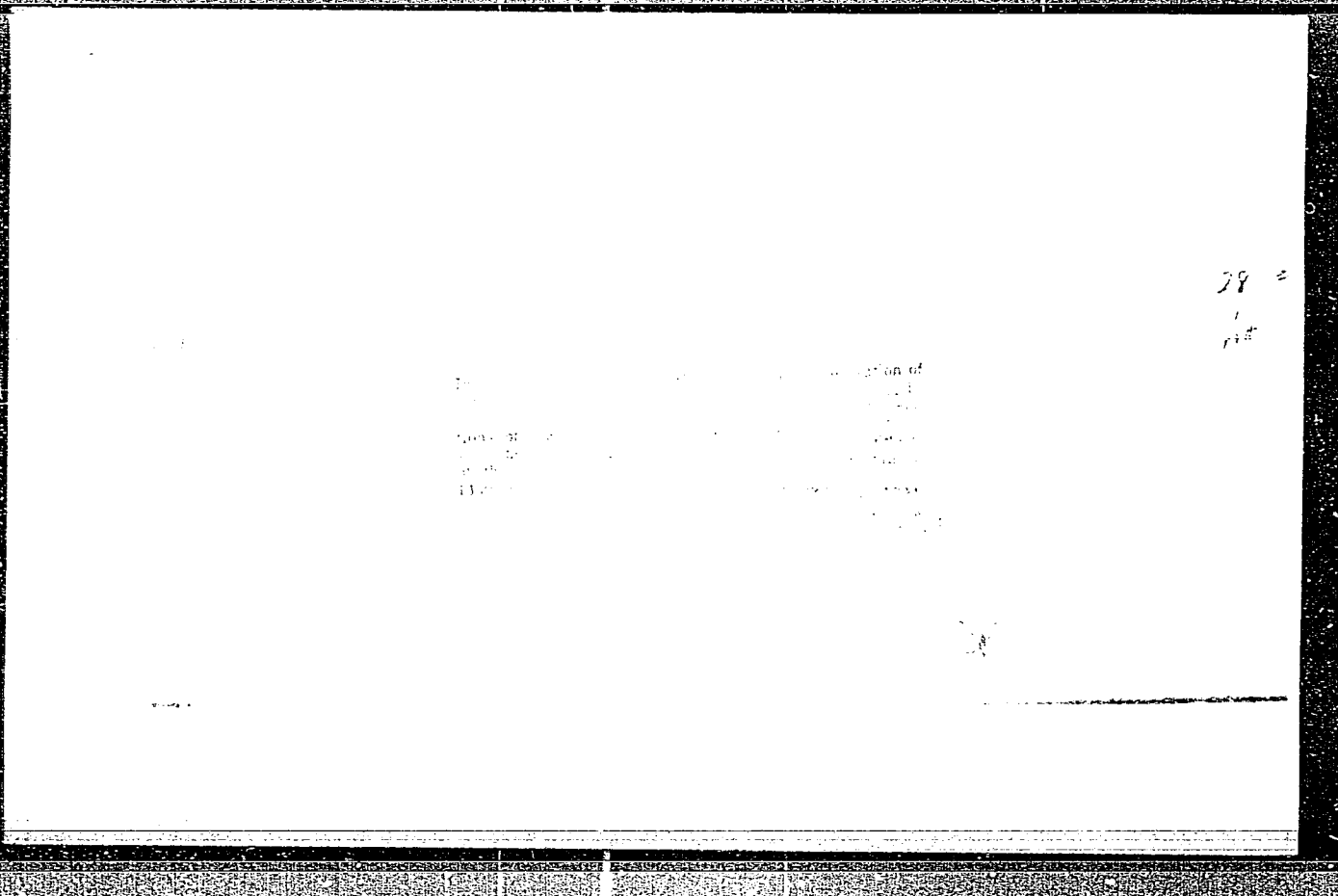
(MIRA 18:12)

1. Institut organicheskoy khimii AN UkrSSR. Submitted Febr. 5, 1965.

VAYNSHTEYN, F.M.; TOMILENKO, Ye.I.; SHILOV, Ye.A.

Kinetics and the mechanism of aniline iodination with iodine  
in aqueous solutions. Kin. i kat. 4 no.3:357-366 My-Je '63.  
(MIRA 16:7)

1. Institut organicheskoy khimii AN UkrSSR.  
(Aniline) (Iodination)



TOMILIN, A., pilot

If autorotation arose. Grazhd. av. 22 no.1:23 Ja '65.  
(MIRA 18:11)  
1. Gosudarstvennyy nauchno-issledovatel'skiy institut  
Grazhdanskogo vozdushnogo flota.

ACC NR: AP6033519

SOURCE CODE: UR/0413/66/000/018/0154/0155 3

INVENTOR: Khabarov, A. V.; Kozlov, V. S.; Morozov, B. A.; Myrsov, V. K.; Shevchenko, B. P.; Tomilin, A. A.; Votyakov, I. A.; Surkov, A. I.

ORG: None

TITLE: A hydraulic press with weight distribution on the base components. Class 58, No. 186283 [announced by the Kolomna Heavy Machine Tool Building Plant (Kolomenskiy zavod tyazheloego stankostroyeniya)]

SOURCE: Izobret prom obraz tov zn, no. 18, 1966, 154-155

TOPIC TAGS: hydraulic equipment, metal forming press

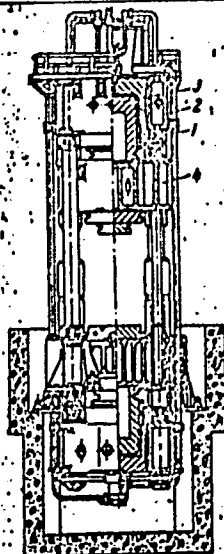
ABSTRACT: This Author's Certificate introduces a hydraulic press with weight distribution for the base components. The installation contains a stand in the form of columns connected by crossbeams, a movable frame of similar construction located inside the stand, a lower working cylinder mounted in the lower crossbeam of the movable frame, and an upper working cylinder. Misalignment of the press under the effect of eccentric loads is prevented by mounting the upper working cylinder in the upper crossbeam of the stand with rigid connection of the plunger for this cylinder to the upper crossbeam of the movable frame.

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UDC: 621.226



ACC NR: AP6033519



1--upper working cylinder; 2--upper crossbeam of the stand;  
3--plunger; 4--uppercrossbeam of the movable frame

SUB CODE: 13/ SUBM DATE: 06Aug65

Card 2/2

Age of whales determined from baleen apparatus. A. G. Tomlin.  
(Comp. rend. Acad. Sci. U.S.S.R., 1948, 60, 640-643).—The age  
of whales may be determined by counting the annual ridges, due to  
seasonal variations in feeding, on the baleen plates. A portion of the  
plate equal to 1 year's growth is concealed below the gum. The  
ridges are best developed on the highest plates of the set. The plates  
are subject to attrition at apex and internal edge and estimations are  
reliable only up to the following ages: *Balaena mysticetus* 19,  
*Eubalaena glacialis glacialis* 10, *E. glacialis sibbaldii* 14, *Balaen-  
opterus musculus* 7, *B. acroterostoma* 8, and *Rhachianectes glaucus* 3 years.  
M. E. N.

SUDAKOV, S.G.; ALEKSANDROV, T.F.; YELISEYEV, S.V.; IZOTOV, A.A.; KUZ'MIN, B.S.; LARIN, D.A.; LETVINOV, B.A.; MOLODETSKIY, M.S.; POVALYAYEV, P.I.; RYTOV, A.V.; TIMOFEEV, A.A.; TOMILIN, A.F.; SHISHKIN, V.N. KUZ'MIN, G.M., tekhnicheskiy redakter.

[Triangulation on the 1,2,3 and 4 order] Instruktsiya po triangulyatsii 1,2,3 i 4 klassov. Moskva, Izd-vo geodesicheskoi lit-ry, 1956. 307 p. (MIRA 9:5)

1. Russia (1923- U.S.S.R.) Glavnoye upravleniye geodesii i kartografi. (Triangulation)

SUDAKOV, S.G.; ALEKSANDROV, T.F.; BULANOV, A.I.; DURNEV, A.I.;  
YELISEYEV, S.V.; ZAKATOV, P.S.; IZOTOV, A.A.; KARLOV, G.M.;  
KUZ'MIN, B.S.; KUKUSHKIN, A.D.; KOLUPAYEV, A.P.; KUZLOVA, Ye.A.;  
LARIN, B.A.; LARIN, D.A.; LARIN, B.A.; LITVINOV, B.A.; MAZAYEV,  
A.V.; PELLINEN, L.P.; PETROV, A.I.; SOLOV'YEV, A.I.; TOMILIN, A.F.;  
URALOV, S.S.; USPENSKIY, M.S.; FOMIN, M.P.; SHISHKIN, V.N.; SHCHEGLOV,  
A.P.; SUDAKOV, S.G., otv. red.; KOMARKOVA, L.M., red. izd-vz; SUNGUROV,  
V.S., tekhn. red.

[Instruction concerning the building-up of a state geodetic network  
in the U.S.S.R.] Instruksia o postroenii gosudarstvennoi geodezi-  
cheskoi seti Soiuza SSR; obiazatel'na dlia vseh vedomstv i uch-  
rezhdenii, proizvodiaschikh gosudarstvennye geodezicheskie seti.  
Moskva, Izd-vo geodez. lit-ry, 1961. 459 p. (MIRA 15:6)

1. Russia (1923- U.S.S.R.) Glavnoye upravleniye geodezii i karto-  
grafii.

(Geodesy)

TOMILIN, A. G.

PA 58T67

USSR/Medicine - Anatomy  
Medicine - Animals

Jan 1947

"New Outlook on Cetaceous Gushers," A. G. Tomilin,  
3 pp

"Dok Akad Nauk SSSR, Nova Ser" Vol LV, No 1

Describes detailed research into composition of  
gushers produced by whales and into the means by  
which whale expels gusher. Submitted by Academi-  
cian I. I. Shmal'gauzen, 23 Jun 1946.

58T67

1. 12. 1. 1.

"The Biology and Physiology of the Delphinus Delphis L.," Dok. AN, 56, No. 2, 1947

Tomilin, A. G.

Doc Biolog Sci

Dissertation: "Problems of the Ecology of Cetacean Animals."

28 February 49

Moscow Fur (and Pelt) Institute

SO Vecheryaya Moskva  
Sum 71

TOMILIN, A.G.

Systematic interrelations between northern and southern rorquals.  
Biol.MOIP Otd.boil.58 no.6:3-6 '53.

(MLFA 7:1)

(Whales)



TOMILIN, A.G.

Adaptable types of the order Cetacea (ecological classification of Cetacea). Zool.zhur. 33 no.3:677-692 My-Je '54. (MLRA 7:7)

1. Moskovskiy pushno-mekhovoy institut.  
(Cetacea)

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**APPROVED FOR RELEASE: 04/03/2001**

**CIA-RDP86-00513R001756220004-4"**

~~TOMILIN, Ayanir Grigor'evich~~ GEPTNER, V.G., professor, otvetstvennyy  
redaktor; MAKAROVA, B.M., redaktor izdatel'stva; KISELEVA, A.A.,  
tekhnicheskiiy redaktor.

[Animals of the U.S.S.R. and adjacent countries] Zveri SSSR i  
ptilezhashchikh stran. Moskva. Vol.9. Tomilin, A.G.[Cetaceans]  
Kitoobraznye. 1957. 756 p. (MLRA 10:6)

1. Akademiya nauk SSSR.

(Catacea)

SOV/26-58-1-22/36

AUTHOR: Tomilin, A.G., Doctor of Biological Sciences

TITLE: Peculiarities in the Behavior of Cetaceans (Osobennosti povedeniya kitoobraznykh)

PERIODICAL: Priroda, 1958, Nr 1, pp 110-111 (USSR)

ABSTRACT: Experiments with common dolphins permitted the establishment of two reflexes for the cetaceans, which maintain breathing safety under any weather conditions for the active and sleeping phases. One of the reflexes leads to the opening of the blowhole and a very brief expiration, and air intake, not depending on the respiration interval, as soon as the animal gets to the water surface. The other reflex is connected with the movement of the tail which is put upwards shortly before or at the beginning of the expiration, in order to have the nostril take in the highest level above the water surface when the air is breathed in. These unconditioned reflexes that are also found among the new-born are the most important adaption to life in water. The remarkable fact that cetaceans assist weak or wounded and new-born or even still-born individuals in the respiration act by dragging them to the water surface when their behavior points at approaching suffocation

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· Peculiarities in the Behavior of Cetaceans

SOV/26-58-1-22/36

seems to be connected with these reflexes.

There is 1 photo and 11 references, 3 of which are Soviet,  
1 Danish and 7 English.

ASSOCIATION: Institut nauchnoy informatsii AN SSSR, Moskva (Institute of  
Scientific Information of the AS USSR, Moscow)

Card 2/2

TOMILIN, A. G.

Some data on thermoregulation in the common dormouse (*Muscardinus avellanarius*); changes in the nature of respiration and body temperature during hibernation and the period of activity [with summary in English]. Zool. zhur. 37 no.1:120-130 Ja '58.

(MIRA 11:2)

1. Gosudarstvennyy pedagogicheskiy institut im. V.I. Lenina, Moskva.  
(Dormouse) (Animal heat) (Hibernation)

TOMILIN, A.G., doktor biol.nauk

Sesquicentennial of the birth of Charles Darwin. Zhiyotnovodstvo  
21 no.3:60-63 № 159. (MIRA 12:4)  
(Darwin, Charles Robert, 1809-1882)

TOMILIN, A.G.

Migrations, geographical races, thermoregulation, and the effect  
of environmental temperature on the distribution of cetaceans.

Migr. zhiv. no. 2:3-26 '60.

(MIRA 13:12)

1. Vsesoyuznyy sel'skokhozyaystvennyy institut zaochnogo obrazovaniya,  
g. Balashikha.

(Cetacea)

(Body temperature--Regulation)

(Animal migration)

*rec. A. R. SR*



TOMILIN, A.G.

Some current problems in the biological study of cetaceans.  
Trudy sov. Ikht. kom. no.12:40-49 '61. (MIRA 14:6)

1. Vsesoyuznyy sel'skokhozyaystvennyy institut zaochnogo  
obrazovaniya.

(Cetacea) *1. 12/25*

TOMILIN, A.G., prof.; GIL'MAN, Ye.A., red.

[System of the animal world (characteristics of basic groups)]  
Sistema zhivotnogo mira (kharakteristika osnovnykh grupp); ucheb-  
noe posobie dlia studentov zootekhnicheskogo i agronomicheskogo  
fakul'tetov. Moskva, Vses.sel'khoz.in-t zaachnogo obrazovaniia,  
1962. 34 p. (MIRA 16:2)

(Zoology)

TOMILIN, Avenir Grigor'yevich, prof.; PAVLOVSKIY, Ye.N., akademik, glavnyy red.; CHAPSKIY, K.K., red.; BYKHOVSKIY, B.Ye., red.; GROMOV, I.M., red.; MONCHADSKIY, A.S., red.; SKARLATO, O.A., red.; STRELKOV, A.A., red.; SHTAKEL'BERG, A.A., red.; MAKAROV, B.M., red.izd-va; ROMANOV, G.M., tekhn.red.; NOVICHKOVA, N.D., tekhn.red.

[Cetaceans of the seas of the U.S.S.R.] Kitoobraznye fauny morei SSSR. Moskva, Izd-vo Akad.nauk SSSR, 1962. 211 p.  
(Opredeliteli po faune SSSR, no.79). (MIRA 15:8)

1. Direktor Zoologicheskogo instituta AN SSSR (for Pavlovskiy).  
(Cetacea)

TOMILIN, A.G., doktor biolog.nauk

Bionics and the cetaceans. Priroda 51 no.10:101-103 0 '62.

(MIRA 15:10)

1. Vsesoyuznyy sel'skokhozyaystvennyy institut zaochnogo obrazovaniya, g. Balashikha, Moskovskaya obl.  
(Cetacea)

TOMILIN, A.G.

Adaptation of cetaceans to swift ~~swimming~~ and the possibility of making use of this adaptation for the purpose of shipbuilding.

Biul.MOIP.Otd.biol. 67 no.5:10-18 S-O '62. (MIRA 15:10)  
(CETACEA) (SHIPBUILDING—RESEARCH)

TOMILIN, A.G., prof. (Balashikha, Moskovskaya obl.)

The "Intelligentsia" of marine depths; behavior secrets of dolphins  
and whales. Priroda 52 no.7:70-77 J1 '63. (MIRA 16:8)  
(Cetacea)

IVANOVENKO, A.L. (Vladivostok); TASELIN, A.G., prof. (Balsanikha,  
Moskovskaya obl.)

Can dolphins speak? Priroda 54 no.4:106-107 Ap '69.

(MIRA 18:5)

TOMILIN, A.G., prof.

Voice and echolocation in Pinnipedia. Priroda 54 no.8:20-22  
Ag '65. (MIRA 18:2)

1. Vsesoyuznyy sel'skokhozyaystvennyy institut zaochnogo obrazo-  
vaniya, Balashikha, Moskovskaya oblast'.



YEFREMOV, I.S., doktor tekhn. nauk; REKITAR, R.A., inzh.;  
 ROZENBERG, S.V., kand. ekon. nauk; BLATNOV, M.D., kand.  
 tekhn. nauk; VIL'KONETSKIY, M.S., inzh.; TOMILIN, A.I., inzh.;  
 POPELYASH, V.N., inzh.; ZAGAYNOV, N.A., kand. tekhn. nauk;  
 FINKEL'SHTEYN, B.S., inzh.; MARINOV, I.A., inzh.; ISTRATOV, V.P.,  
 inzh.; MARGOLIN, I.S., inzh.; ENGEL'S, G.G., inzh.; ANTONOV,  
 V.A., inzh.; SOKOLOV, V.D., inzh.; KLESHCHINSKIY, B.K., inzh.;  
 IL'INSKIY, A.I., retsenzent; PAPKOV, N.G., retsenzent; SMIRNOV,  
 G.M., retsenzent; SHPOLYANSKIY, M.N., otv. red. toma; VOLOCHNEV,  
 V.N., red.; TROFIMOV, A.N., red.; RACHEVSKAYA, M.I., red. izd-va;  
 LELYUKHIN, A.A., tekhn. red.

[Technical manual on city electric transportation in three  
 volumes] Tekhnicheskii spravochnik po gorodskomu elektro-  
 transportu v trekh tomakh. Redkollegiya: V.N.Volochnev, A.N.  
 Trofimov, M.N.Shpolianskii. Moskva, Izd-vo M-va kommun. khoz.  
 RSFSR. Vbl.1. [City electric transportation (general part)]  
 Gorodskoi elektricheskii transport (obshchaia chast'). Otv.  
 red. toma M.N.Shpolianskii. 1961. 726 p. (MIRA 15:4)  
 (Streetcars) (Trolley buses)

TOMILIN, A.I.

Investigating the passenger flow in surface transportation. Gor.  
khoz.Mosk. 34 no.7:17-19 JI '60. (MIRA 13:7)

1. Glavnyy inzhener sluzhby dvizheniya Upravleniya passazhirskogo  
transporta Mosgorispolkoma.  
(Moscow--Traffic surveys)

SHALAYEV, M.I., kand.med.nauk (Perm', poselok P.D.K., ul. Pesochnaya, d.12);  
KHOLKIN, A.A.; TOMILIN, A.K.; ONOSOV, A.G.

Closed lesions of the liver according to six-year data of some  
hospitals in the Kizel coal basin. Klin.khir. no.9:72 S '62.  
(MIRA 16:5)

(KIZEL BASIN—LIVER—WOUNDS AND INJURIES)

MOSKALENKO, S.I.; GABOVICH, M.S.; BACHINSKIY, Yu.V.; TOMILIN, A.V.;  
MEDVEDEV, P.M.; LOMANOVA, M.M.; GOLOVKOV, P.D.; GAYDUKOV, G.I.;  
ALEYNIKOV, V.V.; STENIN, N.D.; MIROMOVA, V.V.; BELAVINTSEVA,  
Ye.S.; TSVETSINSKIY, S.V.; NECHEPURNYY, P.; KOBZAR', N.K.;  
BOZHNOVA, Ye.S.; PELETNINSKIY, V.N.; GORDEYCHUK, V.K.; SHMERIGO,  
V.F.; KISLYUK, N.

Fifty years in the sugar industry. Sakh.prom. 33 no.2:18  
F '59. (MIRA 12:3)

(Shtepan, Georgii Viacheslavovich, 1888- )

TOMILIN, B.A.

New species of Ascomycetes from the Far East. Bot. ~~mat.~~ Otd.  
spor. rast. 14:187-188 Ja'61. (MIRA 17:2)

TOMILIN, B.A.

Rust fungi (Uredinales) of Kursk Province. Bot. zhur. 44 no.7:1010-1014  
Jl '59. (MIRA 12:12)

1. Botanicheskiy institut im. V.L. Komarova AN SSSR, Leningrad.  
(Kursk Province--Rusts (Fungi))

TOMILIN, B.A.

Fungi of Transbaikalia. Bot. mat. Otd. spor. rast. 16:133-150  
'63. (MIRA 16:10)

TOMILIN, G.

Increase membership in the ranks of the All-Union Volunteer Society for Assistance to the Army, Air Force, and Navy. Voenn. znaniya. 36 no.1: 15-16 Ja '60. (MIRA 12:12)

1. Starshiy inspektor Tsentral'nogo Komiteta Dobrovol'nogo obshchestva sodeystviya armii, aviatsii i flotu SSSR.  
(Military education)



GOL'TSEV, V.P.; DZNELADZE, Zh.I.; TOMILIN, I.A.

Approximate calculation of the interaction of interstitial  
impurities with alloying elements during the sintering of  
molybdenum. Sbor. trud. TSNIICHM no.43:145-150 '65.  
(MIRA 18:10)

TOMILIN, I.A., kand.tekhn.nauk; SHVARTSMAN, L.A., doktor khim.nauk

Effect of silica, calcium oxide and sodium oxide on the distribution of sulfur and phosphorus between iron and iron slag.

Probl.metalloved.i fiz.met. no.6:199-220 '59. (MIRA 12:8)

(Iron--Metallurgy) (Slag) (Thermochemistry)

10 million, L.A.

18(0) PHASE I BOOK EXPLOITATION SOV/2125  
 Tsentr'ny nauchno-issledovatel'skiy institut Chernoy metallurgii.  
 Institut Metallovedeniya i fiziki metallor  
 Problemy metallovedeniya i fiziki metallor (Problems in Physical  
 Metallurgy and Metallophysics) Moscow, Metallurgizdat, 1959.  
 340 p. (Series: Itsi Sbornik trudov, 6) Brata slip inserted.  
 3,600 copies printed.  
 Additional Sponsoring Agency: USSR Gosudarstvennaya planovaya komissiya.  
 Ed. of Publishing House: Ye.M. Berlin; Tech. Ed.: P.O. Isent'yeva;  
 Editorial Board: D.S. Kamenetskaya, B.Ya. Lyubov (Resp. Ed.),  
 Ye.Z. Spektor, L.M. Urvachiy, L.A. Shvartzman, and V.I. Malkin.  
 PURPOSE: This book is intended for metallurgists, metallurgical  
 engineers, and specialists in the physics of metals.  
 COVERAGE: The papers in this collection present the results of  
 investigations conducted between 1954 and 1956. Subjects

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covered include crystallization of metals, physical methods of  
 influencing the kinetics of crystallization, problems in the  
 physical chemistry of metallurgical processes, development of  
 new methods and equipment for investigating metals, and  
 production control. References follow each article.

TABLE OF CONTENTS:

PART II. PHYSICAL CHEMISTRY OF METALLURGICAL PROCESSES

Tomlin, I.A., Candidate of Technical Sciences, and L.A. Shvartzman, Doctor of Chemical Sciences. Effect of Silica, Calcium Oxide, and Sodium Oxide on the Distribution of Sulfur and Phosphorus in Iron and Ferruginous Slag 199  
 It was found that the heat of transfer of sulfur from iron to slag in the system FeO-SiO<sub>2</sub>, saturated with silica, is decreased by the addition of CaO to the slag. At a concentration of about 20 percent CaO the heat of reaction amounts to some 13,000 cal./g. atom which is comparable with the heat of transfer of sulfur from iron to ferruginous slag. Further, on increasing the content of CaO in the slag a sharp increase in entropy takes place. An overall result of these processes is a reduction in the value of the coefficients of sulfur distribution in comparison with acid slag not containing CaO. The introduction of N<sub>2</sub>O into the slag causes the same phenomenon to take place, but in a greater degree. These facts may be explained by the specific interaction of ions in the acid fusion. The free energy of solution of solid iron sulfide in ferruginous and ferruginous-silicate slags was calculated. It was shown that the heat of transfer of phosphorus from iron to acid slag does not differ from the corresponding figure in the case of ferruginous slag. The coefficients of diffusion of phosphorus, however, are considerably different in the first case than in the second. This can be explained by the presence of a structure of silicate polymers in the acid slag. Addition of CaO and Na<sub>2</sub>O to acid slag increase the heat of reaction of phosphorus, and at the same time the values of the coefficients of distribution rise.

Kozhevnikov, I.Yu., Candidate of Technical Sciences, and L.A. Shvartzman. Effect of Oxides of Alkali Earth Metals on the Equilibrium of the Dephosphorization Reaction of Iron 221

Card 9/18

*TO: M. I. H. I.*  
POHILIN, A. I.

Reduce the overloading of public transportation by staggering the times for the beginning of work at enterprises and institutions.  
Gor.khoz.Mosk. 31 no.7:34 J1 '57. (MIRA 10:9)

1. Nachal'nik sluzhby dvizheniya Tramvayno-trolleybusnogo upravleniya  
Mosgorisnolkoma.  
(Moscow--Traffic engineering)

TOMILIN, A. I.

28008. TOMILIN, A. I. -- K patogenezu gemotorakaa. (Sud'ba krovi izlivosheysya v plevral'nuyu polost'). Yubileyny sbornik khirurg. Rabot. Posvyashch. Prof. Shilovtsevu. Kuybyshev, 1949, S. 340-58.

SO: Letopis' Zhurnal'nykh Statey. Vol. 37, 1949.

TOMILIN, A.V.

Manufacturing cost of sugar and means for lowering it. Sakh. prom.  
32 no.5:58-61 My '58. (MIRA 11:6)

1. Kurskiy sakhsveklotrest.  
(Sugar industry--Costs)

POMILIN, B. A.

"Micromycetes of the Kursk District."

dissertation defended for the degree of Candidate of Biological Sciences at  
the Inst. of Botany in V. L. Komarov.

Defense of Dissertation (Jan-Jul 1957)

Sect. of Biological Sciences

Vest. AN SSSR, 1957, v. 27, No. 12, pp. 115-117

TOMILIN, B.A.

Fungi of some typical phytocoenoses of the Amur subtaiga.  
Bot. zhur. 47 no.8:1116-1125 Ag '62. (MIRA 15:10)

1. Botanicheskiy institut imeni V.I. Komarova AN SSSR, Leningrad.  
(Amur Province—Fungi) (Amur Province—Forest ecology)



TOMILIN, B.A.

Environmental factors influencing the distribution of fungi  
among plant communities. Bot. zhur. 49 no.2:230-239 F '64.  
(MIRA 1736)

1. Botanicheskiy institut imeni V.L. Komarova Akademii  
nauk SSSR, Leningrad.

TOMILIN, B.A.

A review of the micromycetes of Kursk Province. Bot.zhur.42 no.2:297-  
300 1957. (MLRA 10:3)  
(Kursk Province--Fungi, Phytopathogenic)

TOMILIN, B. A. Cand Biol Sci - (diss) "Micromycetes of ~~the~~ *Kurskaya* Oblast." Len, 1957. 16 pp 22 cm. (Academy of Sciences USSR, Botanical Inst im V. L. Komarin), 100 copies (KL, 17-57, 96)

- 24 -

TOMILIN, B.A.

New and interesting species of fungi from Kursk Province.  
Bot.mat.Otd.spor.rast. 12:271-274 Ja '59. (MIRA 12:12)  
(Streletskoye Steppe Preserve--Deuteromycetes)  
(Streletskoye Steppe Preserve--Pyrenomycetes)

TOMILIN, B. A.

Author: Tomilin, B. A.

Title: Various tools for high speed cutting of metal. (Instrumenty svia skorostrogo  
rezaniiia metallov.) 231 p.

City: Moscow

Publisher:

~~Publications~~ State Scientific and Technical Printing House of Machine Con. Ltd.

Date: 1950

Available: Library of Congress

Source: Monthly List of Russian Accessions, Vol. 3, No. , Page 538

LOPATIN, A.B., inzhener; TOMILIN, D.S., inzhener.

Testing secondary circuits on increased voltage. Elek. sta. 28 no.6:  
51-52 Jo '57. (MIRA 10:8)

(Electric insulators and insulation)

TOMIK, F.  
SURNAME, Given Names

Country: Czechoslovakia

Academic Degrees: not given

Affiliation: Third Internal Clinic Medical Faculty, Comenius University  
Professor T.R. Niederland, MD. Bratislava. (III. interna klinika  
lekarske fakultete Univ. Komenskeho v Bratislave, prednosta  
profesor MUDr. T.R. Niederland) Bratislava.

Source: Prosecution Unit, Okres Institute of Public Health, Head F.  
Tomik MD. (Prosektura OUNZ prednosta MUDr. F. Tomik,) Trnava.  
Prague, Ceskoslovenska Gastroenterologie a Vyziva, Vol 15,  
No 6, Sept. 1961; pp 408- 413.

Data: Correlation of some Biochemical Findings with Morphological  
Ones After Experimental Liver Damage with Tetrachlormethane.

VIDO, I.,  
TOMIK, F.,  
VIDO, J.,  
DOBIS, J.

CPD 981643

TOMILIN, G.

Supernumerary vice-president of the district committee. Voenn. znaniya.  
37 no.11:22-23 N '61. (MIRA 14:11)

1. Starshiy inspektor Tsentral'nogo komiteta Dobrovol'nogo obshchestva  
sodruzhestviya armii, aviatsii i flotu.  
(Perm Province--Military education)



TOMILIN, G.

The committee, an organ of collective leadership. Voenn. znaniya.  
38 no.6:10-11 Je '62. (MIRA 15:6)

1. Starshiy inspektor Tsentral'nogo komiteta Dobrovol'nogo  
obshchestva sodeystviya armii, aviatsii i flotu.  
(Military education)

TOMILIN, G.

Voluntary instructor Viacheslav Maneshin. Kryl.rod.  
13 no.1:16 Ja '62. (MIRA 15:2)  
(Parachuting)

TOMILIN, G. (Saratov)

With students in Saratov. Za rul. 18 no.4;4 Ap '60. (MIRA 13:8)  
(Saratov--Motorcycle racing)

TOMILIN, G.

Support from active members. Voen.znan. 32 no.10:19 0 '56.

(MLRA 10:2)

1. Starshiy inspektor Tsentral'nogo komiteta Dobrovol'nogo obshchestva armii, sodeystviya aviatsii i flotu SSSR.  
(Military education)

TOMILIN, G.

In Crimean stanitsa. Voen.znan. 29 no.7:7 JI '53.

(MLAA 6:7)

(Military education)

TOMILIN, G.

~~In step with life. Voen.znan. 35 no.6:6-7 Je '59.~~

(MIRA 12:12)

1. Starshiy inspektor Tsentral'nogo komiteta Dobrovol'nogo obshchestva sodeystviya armii, aviatsii i flotu SSSR.  
(Pskov--Military education)

TOMILIN, G.

Socialist competition in action. Voen.znan. 36 no.5:20  
My '60. (MIRA 13:4)

1. Starshiy inspektor TSentral'nogo komiteta Dobrovol'nogo  
obshchestva sodeystviya armii, aviatsii i flotu.  
(Military education)

TOMILIN, G.

Community, initiative, cost accounting. Voen. znan. 41 no.4:  
29-30 Ap '65. (MIRA 12:3)



TMILIN, G.

Shop workers' organization. Voenn. znan. 39 no.2:24 F '63.  
(MIRA 16:3)

1. Starshiy inspektor Tsentral'nogo komiteta  
Dobrovol'nogo obshchestva sodeystviya armii, aviatsii  
i flotu.

(Military education)

TOMILIN, G.

Outside group of instructors for the District Committee of the  
All-Union Volunteer Society for Assistance to the Army, Navy,  
and Air Force. Voen. znan. 39 no.4:19-20 Ap '63.

(MIRA 16:6)

1. Starshiy inspektor Tsentral'nogo komiteta Dobrovol'nogo  
obshchestva sodeystviya armii, aviatsii i flotu.

(Military education)

TOMILIN, G.N. , V.P. MIASNIKOV and S.A. ZHURAVLEV.

Instrumenty dlia skorostnogo rezaniia metallov. Moskva, Mashgiz, 1950.  
231 p. diagrs.

Bibliography: p. 229-(230)

Tools for high-speed metal cutting.

DLC: TJI230.T65

SO: Manufacturing and Mechanical Engineering in the Soviet Union, Library  
of Congress, 1953.

VISHNITSKIY, Aleksandr Lazarevich, inzh.; TOMILIN, G.N., red.;  
FREGER, D.P., red. izd-va; GVIRTS, V.I., tekhn. red.

[New developments in dimensional electric machining of  
metals] Novoe v razmernoj elektroobrabotke metallov;  
obzor. Leningrad, Leningr. dom nauchno-tekhn. propagandy,  
1962. 92 p. (MIRA 16:11)

(Electric metal cutting)

TOMLIN, G. N., et al.,

"Tools for Rapid Cutting of Metals," Moscow 1950, 1 copy.

TOMILIN, G.N., inzhener, redaktor.

[Work of innovator and Stakhanovite toolmakers in Leningrad plants]  
Iz opyta novatorov i stakhanovtsev instrumental'shchikov Leningradskikh  
zavodov. Leningrad, Gos. nauchno-tekhn. izd-vo mashinostroit. lit-ry  
[Leningradskoe otd-nie] 1951. 190 p. (MLRA 7:4)  
(Machine-tool industry)

10.11.1957  
SHVARTSMAN, L.A.; TOMILIN, I.A. (Moskva).

Acid-base properties of metallurgic slags. Usp. khim. 26 no.5:554-  
567 My '57. (MIRA 10:6)

(Slag)

TOMILIN, I.A.; SHVARTSMAN, L.A., doktor khim.nauk

Distribution of sulfur and phosphorus between iron and acid slag.  
Probl. metalloved. i fiz. met. no.4:595-603 '55. (MIRA 11:4)  
(Iron--Metallurgy)



TCMILIN, I.A.; SAVOST'YANOVA, N.A.

Determining nitrogen solubility in chromium. Issl. po zharoproch. splav.  
10:283-289 '63. (MIRA 17:2)

TOMILIN, I.A.; SAVOST'YANOVA, N.A.

Determination of the solubility of nitrogen in solid chromium.

Zav.lab. 28 no.8:959-961 '62.

(MIRA 15:11)

1. Tsentral'nyy nauchno-issledovatel'skiy institut chernoy  
metallurgii imeni I.P.Bardina.

(Chromium nitrides)

*Tomilin I.A.*

137-1958-2-2345

Translation from: Referativnyy zhurnal, Metallurgiya, 1958, Nr 2, p 20 (USSR)

AUTHORS: Shvartsman, L.A., Tomilin, I.A., Travin, O.V., Popov, I.A.

TITLE: The Effect of the Oxides of ~~Alkali~~ Earth Metals on the Distribution of Sulfur Between Iron and Ferruginous Slag (Vliyaniye okislov shchelochnozemel'nykh metallov na raspredeleniye sery mezhdz zhelezom i zhelezistym shlakom)

PERIODICAL: V sb.: Fiz.-khim. osnovy proiz-va stali. Moscow, AN SSSR, 1957, pp 304-318. Diskus., pp 332-334

ABSTRACT: The radioactive isotope  $S^{35}$  was used to study the dependence on the temperature of the distribution of S between Fe and a slag consisting of Fe oxides. The results are described by the equation

$$\log K_s = \left( \frac{3000}{T} \right) - 1.05 ,$$

wherein  $K_s$  is the coefficient of distribution of S, computed as the ratio of the counting rate from the slag to the counting rate from the metal, the counting rates being computed by the thick-layer method. The MgO content of the ferruginous slag, so long as it

Card 1/2 did not exceed 7.76%, exhibited no influence either on the  $K_s$  value

137-1958-2-2345

The Effect of the Oxides of Alkaline-Earth Metals (cont.)

or on its dependence on temperature. With the maximum precision attainable in the experiment it was found that the CaO content, up to 12%, likewise did not alter the  $K_s$  value. For ferruginous slag containing more than 12% CaO it was learned that

$$\log K_s = \left( \frac{3700}{T} \right) - 1.26 .$$

This equation is correct for a CaO content up to 33%. The smallness of the effect exerted by the CaO on the K value is accounted for by the increase that occurred in the  $Fe_2O_3$  concentration when CaO was introduced into the slag. For a slag containing 11.5 - 16.2% BaO, the equation obtained was  $\log K_s = (3200/T) - 0.99$ .

From the dependence on temperature of  $K_s$  a computation was made of the heat effect of the desulfurization of the Fe by a slag consisting only of Fe oxides + 14 kcal/gram.atom, with addition of more than 12% CaO + 17 kcal/gram.atom and 11-16% BaO + 14 kcal/gram.atom. The smallness of the heat effect and the smallness of the difference between them when one oxide was substituted for another are accounted for by the absence in ferruginous slags of any specific chemical reaction of oxides of Ca, Ba, and Mg with S.

I.T.

Card 2/2

1. Sulfur--Distribution    2. Iron--Applications    3. Slag--Applications  
4. Alkaline earths--Oxidation--Effects

SHVARTSMAN, L.A., doktor khim.nauk; MALKIN, V.I., kand.tekhn.nauk;  
TOMILIN, I.A., kand.tekhn.nauk

~~A. M. Korozov's~~ article "Modern slag theory and the theory of  
steel smelting processes." Izv. vys. ucheb. zav.; chern. met.  
no.7:63-65 J1 '58. (MIRA 11:10)  
(Steel--Metallurgy)

TOMILIN, I.A., SHVARTSMAN, L.A.

"Acid-Basic Properties of Slags,"  
lecture given at the Fourth Conference on Steelmaking, A.A. Baikov Institute of  
Metallurgy, Moscow, July 1-6, 1957

L 2683-66 EWT(m)/EWP(w)/T/EWP(t)/EWP(b) IJP(c) JD/JW/JG

ACCESSION NR: AT5022899

UR/2776/65/000/043/0145/0150

AUTHOR: Gol'tsev, V. P.; Dzeladze, Zh. I.; Tomilin, I. A.

TITLE: Approximate calculation of the interaction between interstitial impurities and alloy elements during the sintering of molybdenum

SOURCE: Moscow. Tsentral'nyy nauchno-issledovatel'skiy institut chernoy metal-lurgii. Sbornik trudov, no. 43, 1965. Poroshkovaya metallurgiya (Powder metal-lurgy), 145-150

TOPIC TAGS: interstitial nitride, metal powder, molybdenum, sintering, carbide, oxide formation, isobaric potential

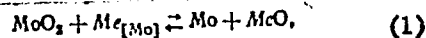
ABSTRACT: In the process of their sintering, pressed molybdenum briquets may absorb additional impurities in amounts depending on the sintering atmosphere employed. The most harmful impurities, sharply depressing the plastic properties of molybdenum, are oxygen, nitrogen, and carbon, which, have limited solubility in molybdenum in the solid state. When their content exceeds the solubility limit, these impurities are present in the form of compounds with molybdenum -- oxides,

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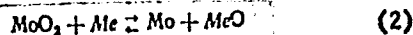
L 2683-66

ACCESSION NR: AT5022899

nitrides<sup>?</sup> and carbides<sup>?</sup>, which usually are located at grain boundaries and cause a drastic embrittlement of molybdenum. According to the theory of brittle fracture (Cottrell, A. H., Bilby, B. A. Proc. Roy. Soc., 1949, 62-A, 49), the plasticity of metals with body-centered crystal lattice is a function of the content of the impurities forming interstitial solutions. Hence, it was of interest to establish the amount of impurities remaining in the solid solution of Mo on alloying it with elements forming firm oxides, nitrides, and carbides. So the authors describe a method of approximate calculation of the refining of molybdenum to remove oxygen and present an evaluation of its concentration in the alloy for a given content of alloy element and temperature. It involves determining the amounts of deoxidizing elements required for the complete reduction of MoO<sub>2</sub> in the molybdenum. The interaction reaction is



which may be represented in the form of two reactions:



and



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ACCESSION NR: AT5022899

3

Each of these three reactions has its own corresponding values of variation in the isobaric potential of the formation of the oxides of Mo and of the deoxidizing metal. It is shown that the reaction of the reduction of  $\text{MoO}_2$  with Zr, V, Ti, Hf, La, and Y is thermodynamically possible over a broad range of temperatures from 298 to 2000°K and proceeds to the end in the presence of extremely low amounts (0.01% - 0.02%) of the deoxidizing metal. Curves of the equilibrium constant of the oxygen dissolved in the solid solution of Mo are plotted as a function of the amount of the added deoxidizing metal and temperature. This method is also applicable to calculating the conditions for refining molybdenum to remove nitrogen and carbon. Orig. art. has: 2 figures, 1 table, 18 formulas.

ASSOCIATION: none

SUBMITTED: 00

ENCL: 00

SUB CODE: MM, ME

NO REF SOV: 001

OTHER: 005

gases in metal (8)

Card

*1/2*  
3/3

PETROVA, Ye.F.; TOMILIN, I.A.

Effect of oxygen on the activity of carbon in austenite.  
Izv. AN SSSR. Neorg. nat. 1 no.10:1732-1736 0 '65.  
(MIKA 18:12)

1. Tsentral'nyy nauchno-issledovatel'skiy institut chernoy  
metallurgii imeni I.P. Bardina. Submitted July 5, 1965.

SHVARTSMAN, L.A.; TOMILIN, I.A.

"Use of radioactive isotopes in metallurgy." Reviewed by  
L.A. Shvartsman, I.A. Tomilin. Zhur.fiz.khim. 31 no.3:740-742  
Mr '57. (MLRA 10:7)  
(Radioisotopes--Industrial applications) (Metallurgy)

**"APPROVED FOR RELEASE: 04/03/2001**

**CIA-RDP86-00513R001756220004-4**

**APPROVED FOR RELEASE: 04/03/2001**

**CIA-RDP86-00513R001756220004-4"**

SHVARTSMAN, I.A., doktor khim.nauk; TOMILIN, I.A.; TRAVIN, O.V.; POPOV, I.A.  
kand.tekhn.nauk

Effect of alkaline earths on the distribution of sulfur between iron  
and iron slag. Probl. metalloved. i fiz. met. no.4:577-594 '55.  
(Alkaline earths) (Iron--Metallurgy) (MIRA 11:4)  
(Sulfur)

TOMILIN, I. A.

TOMILIN, I. A.: "Equilibrium in the distribution of sulfur and phosphorus between iron and acid slag." Min Higher Education USSR. Moscow Order of Labor Red Banner Institute I.V. Stalin. Moscow, 1956. (Dissertations for the Degree of Candidate in Technical Sciences.)

SO: Knishnava letopis' No. 22, 1956

ACCESSION NR: AT4013966

S/2659/63/010/000/0283/0289

AUTHOR: Tomilin, I. A.; Savost'yanova, N. A.

TITLE: Determination of the solubility of nitrogen in chromium

SOURCE: AN SSSR. Institut metallurgii. Issledovaniya po zharoprochny'm splavam, v. 10, 1963, 283-289

TOPIC TAGS: chromium, nitrogen, nitrogen solubility, solubility, chromium alloy

ABSTRACT: The detailed investigation of chromium-nitrogen alloys was started not long ago, when chromium and its alloys began to be used as structural materials at high temperatures. Numerous investigations led to the conclusion that the brittleness of chromium at low temperatures is caused by the presence of impurities, especially carbon or nitrogen. Nitrogen, present as a solid solution, has a strong influence on the mechanical properties of chromium, a property which has now been used as an expedient way of determining its solubility in solid chromium. The solubility of nitrogen in chromium is determined by an investigation of the following equilibrium reactions.



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ACCESSION NR: AT4013966

at different pressures and temperatures. Then, these equations were used to determine the thermodynamic characteristics of solutions of nitrogen in chromium and of chromium nitride ( $\text{Cr}_2\text{N}$ ). Several graphs illustrate the findings. The dependence of the nitrogen concentration in chromium on the pressure was determined, and it was shown that solid solutions of nitrogen in chromium are ideal dilute solutions. Figure 1 of the Enclosure shows the results of the determination of the solubility of nitrogen in chromium in relation to the pressure at temperatures of 1250 and 1340C. Figure 2 of the Enclosure shows the solubility of nitrogen in solid chromium in relation to temperature. Finally, the dependence of the dissociation pressure of chromium nitride on the temperature is shown in Figure 3 of the Enclosure. Orig. art. has: 5 figures and 14 formulas.

ASSOCIATION: Institut metallurgii AN SSSR (Institute of Metallurgy AN SSSR)

SUBMITTED: 00

DATE ACQ: 27Feb64

ENCL: 03

SUB CODE: MM

NO REF SOV: 004

OTHER: 018

Card 2/6



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**CIA-RDP86-00513R001756220004-4"**

TOMLIN, I.A.

Thermodynamic properties of austenite as related to its structure.  
Dokl. AN SSSR 162 no.2:384-387 My '65. (MIRA 18:5)

1. Institut metallovedeniya i fiziki metallov Tsentral'nogo nauchno-  
issledovatel skogo instituta chernoy metallurgii.

TOMILIN, I.A. (Moskva); SHVARTSMAN, L.A.(Moskva).

Distribution of sulfur between iron and rion slags. Izv.AN  
SSSR. Otd.tekh.nauk no.10:122-125 0 '56. (MIRA 10:1)  
(Iron sulfides)

AUTHORS: Tomilin, I.A., Khokhlov, S.F. and Shvartsman, L.A. (Moscow).  
 TITLE: Influence of admixtures of calcium and sodium oxides on the distribution of the sulphur between the iron and the acidic slag. (Vliyaniye dobavok okislov kal'tsiya i natriya na raspredeleniye sery mezhdru zhelezom i kislym shlakom).  
 PERIODICAL: "Izv. Ak. Nauk, Otd. Tekh. Nauk" (Bulletin of the Ac. Sc., Technical Sciences Section), 1957, No.4, pp.152-156 (USSR).  
 ABSTRACT: In a previous paper (Izv. Ak. Nauk, Otd. Tekh. Nauk, 1953, No.12) the authors studied the distribution of sulphur between the iron and the acidic slag consisting of a melt of iron oxides which were saturated with silica. In this paper the results are described of studies of the influence on this equilibrium of additions of calcium and sodium oxides to the acidic slag. The used technique was described earlier (1) and (2). The slag was first smelted and the mixture for smelting was prepared from chemically pure iron oxide and quartz powder to which a certain quantity of calcium and sodium carbonate were added. The investigations were carried out by means of the radio-active isotope  $S^{35}$ . The curves of self-absorption were also measured for a slag consisting of iron oxides and a slag of a complex composition containing about 20%  $Na_2O$ , about 30% iron oxides and about 50%  $SiO_2$ ; the results of these measurements are given in Fig.1. The results of the tests

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Influence of admixtures of calcium and sodium oxides on the distribution of the sulphur between the iron and the acidic slag. (Cont.).  
24-4-26/34

in which the equilibrium was studied are given in the Tables 2 and 3 and in the graphs 2 and 3. The heat of transition of the sulphur from the iron into the slag of the system  $\text{FeO-SiO}_2$  which is saturated with silica, decreases if calcium oxide is added to the slag. For a calcium concentration of about 20% the reaction heat amounts to about 13 000 cal/g-atom, which almost corresponds to the heat of transfer of the sulphur from the iron into the ferrous slag. In addition, an increase in the  $\text{CaO}$  concentration in the slag brings about some increase in the entropy of the  $\text{FeS}$ . The overall result of these processes is a decrease of the sulphur distribution coefficients compared to the acidic slag not containing  $\text{CaO}$ . Introduction of  $\text{Na}_2\text{O}$  into the investigated slag causes the same phenomena to a still more intensive degree. These phenomena are attributed to the specific interaction of the ions in the acidic melt. There are 3 figures, 3 tables, 8 references, 7 of which are Russian.

Card 2/2

ASSOCIATION: Institute of Metallography and Metal Physics, TsNIICM.  
SUBMITTED: July 17, 1956.

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T. A. H. T. A.

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**CIA-RDP86-00513R001756220004-4"**

TOMILIN, I.A.  
TOMILIN, I.A. (Moskva); KHOKHLOV, S.F. (Moskva); SHVARTSMAN, L.A. (Moskva).

Effect of calcium and sodium oxide admixtures on sulfur distribution in iron and in acid slag. Izv. AN SSSR. Otd. tekhn. nauk no. 4:152-156 (MIRA 10:6) Ap '57.

1. Institut metallovedeniya i fiziki metallov Tsentral'nogo nauchno-issledovatel'skogo instituta chernoy metallurgii.  
(Slag) (Iron alloys--Metallurgy)